## ISSUE SLIP STAPLE AREA (for additional cross references)

| POSITION            | INITIALS | ID NO.                                | DATE    |
|---------------------|----------|---------------------------------------|---------|
| FEE DETERMINATION   | Mus      | · · · · · · · · · · · · · · · · · · · | \$17,90 |
| O.I.P.E. CLASSIFIER |          | 7                                     | 5-24-99 |
| Formality review    |          | N1(98                                 | 5/22    |

## index of claims

| 9 | Rejected                   | N   | Non-elected  |
|---|----------------------------|-----|--------------|
| = | Allowed                    | - 1 | Interference |
| _ | (Through numeral) Canceled | Α   | Appeal       |
|   | Restricted                 | 0   | Objected     |

| — (11100yii nunera)  |  |              |          |          |               |          |              |  |          |                 |   |          |          | ••••••  |              | Objected |          |           |          |          |          |   |          |            |           |            |          |          |          |                 |            |
|----------------------|--|--------------|----------|----------|---------------|----------|--------------|--|----------|-----------------|---|----------|----------|---------|--------------|----------|----------|-----------|----------|----------|----------|---|----------|------------|-----------|------------|----------|----------|----------|-----------------|------------|
| Clain                |  |              |          |          |               | Claim    |              |  |          | Date            |   |          |          |         |              | Cla      | im       | Date      |          |          |          |   |          |            |           |            |          |          |          |                 |            |
| Final<br>September 1 | S/11/10                                | $r_{\kappa}$ | 22       | (9/g/z)  | <i>/</i> 2    |          |              |  |          |                 |   | Final    | Original |         |              |          |          |           |          |          |          |   | Final    | Original   |           |            |          |          |          |                 |            |
| 3                    | <u> </u>                               | 1            | J        | 1        | 1             | L        | L            |  | L        | Ш               |   | _        | 51       | _       | _            |          | Ш        |           |          | Ш        | $\Box$   | ↓ |          | 101        | $\perp$   |            | L        |          |          | $\square$       |            |
|                      | IJ                                     | J            |          | Ҵ        | 4             | ╙        | ┡            | <b> </b>   | _        | Ш               |   |          | 52       |         | <del> </del> |          | Ш        | _         | L        |          |          | 4 |          | 102        | ╄         | ļ          | ┞.       | Ш        | Щ        | Ш               |            |
| <i>[1]</i>           | 江                                      | J            |          | L        | 2             | Ļ        | L            | <u> </u>   | ╙        | $\sqcup$        |   | L        | 53       | $\bot$  | ╄            | _        | L        | _         | <u> </u> |          | 4        | 4 | <u></u>  | 103        | ↓         | <b>!</b>   | <u> </u> | Щ        | Ш        | Ш               |            |
|                      | 出                                      | 1            | -        | 1        | _             | ⊢        | ₽            | ⊢  | ⊢        | -               |   | <u> </u> | 54<br>55 |         | ┼            |          | ┝┉       | H         | $\vdash$ | Щ        |          | 4 | -        | 104<br>105 | ╄         | <b>├</b> — | <u> </u> | Н        | -        | ert             |            |
|                      | ــــــــــــــــــــــــــــــــــــــ | j            | 7        | 1        | 4             | ├        | ⊢            | ╄  | L        | Н               |   |          | 56       |         | -            |          | Н        | <u> </u>  |          | Н        | ├-├-     | 4 |          | 106        | +         | <b>├</b> ─ | ₽.       | Н        | Н        | $\vdash \vdash$ | _          |
|                      | 6 J<br>7 J                             | 14           | 7        | 5        |               | ⊢        | ├-           | ┢  | ┝        | ┨               |   | -        | 57       | +       | ╀            | Н        | Н        |           | $\vdash$ | Н        | $\vdash$ | ┥ |          | 107        | +         | ┢          | -        | Н        |          | $\vdash$        |            |
|                      | <u> </u>                               | ₩            | J        | Ĵ        | V             | ⊢        | ├            | ┢  | -        | ╁┤              | i | _        | 58       | +       | ┿            | $\vdash$ | Н        | -         | $\vdash$ | Н        | +        | ┥ |          | 108        | +         | ┢          | -        | Н        |          | $\vdash$        | _          |
| -                    | 9 J                                    | 7            | J        | 9        | 4             | -        | -            | ┢  | $\vdash$ | $\vdash$        |   | _        | 59       | +       | ╁╌           | $\vdash$ | Н        | _         | $\vdash$ | $\vdash$ | +        | ┥ |          | 109        | +         | ┢          | -        | Н        | $\vdash$ | -               |            |
|                      |  | ۲            | ۳        | ۳        | ř             | ┢        | -            | ┼  | -        | Н               |   |          | 60       | +       | ╁            | $\vdash$ | Н        | -         | Н        | Н        | +        | ┨ |          | 110        | +         | 一          | -        | Н        | $\dashv$ | $\vdash$        |            |
| R                    | J)                                     | -            | H        | H        | $\vdash$      | H        | t            | $\vdash$   | H        | Н               |   |          | 61       |         | ╁╴           | -        |          | -         | Η.       | Н        | +        | 1 |          | 111        | +         | Н          | -        | H        | $\dashv$ | -               |            |
| 1-17                 | <del>M</del>                           | J            | J        | Н        | 7             | H        | t            | H  |          | Н               |   |          | 62       | +       | ╁╌           | $\vdash$ |          |           |          | Н        |          | 1 |          | 112        | +         | $\vdash$   |          | Н        | $\dashv$ | $\top$          | _          |
|                      | 17                                     | 1            | Ť        | H        | $\overline{}$ | H        | H            | $\vdash$   | ┢        | Н               |   |          | 63       | +-      |              | 1        | Н        | _         | -        |          |          | 1 |          | 113        | $\dagger$ | $\vdash$   | H        | H        | $\dashv$ | $\Box$          | _          |
| 1 101                | 31 V                                   |              | H        | _        | Ť             | ┢        | ⇈            | $\vdash$   | H        | П               |   |          | 64       | $\top$  | t            | Н        | Н        |           | _        |          | $\top$   | 1 | _        | 114        | T         |            | М        |          | ┪        | $\dashv$        | _          |
|                      | 317                                    |              | _        | ┢        | $\vdash$      | Ι        | <u> </u>     | 1  | _        | П               |   |          | 65       | ┪       | t            |          | П        |           | П        |          |          | 1 |          | 115        | Ť         | <b>—</b>   | $\vdash$ | П        | ヿ        | ヿ               | _          |
| 1 18                 | 打                                      | Ţ            |          |          |               |          | Ħ            |  |          | П               |   |          | 66       | _       | 1            | П        | П        |           |          |          |          | 1 |          | 116        | $\top$    | $\vdash$   | Г        | П        | ヿ        | ヿ               | _          |
|                      | 朷,                                     | 1            |          |          |               |          |              |  | Г        |                 |   |          | 67       | 1       | 1            | П        |          |           |          |          |          | ٦ |          | 117        | 1         | П          |          |          | コ        | T               | _          |
| H                    | <b>17</b> ,                            |              |          |          |               | Г        | Г            | Г  | Г        | П               |   |          | 68       | 1       |              |          |          |           | /        |          |          | 1 | Г        | 118        | $\top$    |            |          |          | コ        | T               |            |
| Πī                   | 기                                      |              |          |          |               |          | Г            | T  | Г        |                 |   |          | 69       | _       | Τ            | П        |          |           |          |          |          | 7 |          | 119        | Τ         |            |          |          | ╗        | T               |            |
| 2                    |  | 1            | 7        | J        | 7             |          |              | Г  | Г        | П               |   |          | 70       |         | T            |          |          |           |          |          |          | 1 |          | 120        | Т         |            |          | П        | コ        | T               |            |
| 2                    | オフ                                     | J            | 7        | 7        | ~             | Т        |              | T  | Г        | П               |   | _        | 71       | 1       | t            | М        |          |           |          |          | $\top$   | 1 |          | 121        | $\top$    |            |          |          | $\neg$   | ヿ               |            |
| 1                    |  | 1            | 7        |          | 7             |          | Г            | Г  | Г        | П               | l |          | 72       |         |              | П        |          |           |          |          |          | 1 |          | 122        |           |            |          |          | $\neg$   | $\Box$          |            |
| 2                    |  | J            | 7        | 1        |               | Г        | Π            |  | Г        |                 |   |          | 73       |         |              |          |          |           |          |          | $\top$   |   |          | 123        |           |            |          |          | $\Box$   | $\Box$          |            |
| 2                    | 4 J.                                   | IJ           | J        | 7        | ١             |          |              |  |          |                 |   |          | 74       | $\Box$  | Π            |          |          |           |          |          |          |   |          | 124        |           |            |          |          |          | $\Box$          |            |
| 2                    |  | 1            | 7        | 1        | ν.            |          |              |  |          |                 |   |          | 75       |         |              |          |          |           |          |          |          | ] |          | 125        | L         |            |          |          | $\Box$   | $\bot$          |            |
| 20                   | ఠ                                      | J            | 7        | J        | >             |          |              | L  |          |                 |   |          | 76       |         |              |          |          |           |          |          |          |   | -        | 126        | $\perp$   |            |          |          | _        | _               | _          |
| 2                    |  | 7            |          | j        | ۱۹            |          |              |  |          | Ш               |   |          | 77       |         |              |          |          |           |          |          |          | ] |          | 127        | 1_        | Ш          |          | $\dashv$ | _        | 4               |            |
| []2                  |  | L            | 乜        | 1        | J             | L        | _            |  | L        | Ш               | ļ |          | 78       | $\perp$ | L            | Ш        |          |           |          |          |          | ] |          | 128        | L         | Ш          |          | $\Box$   | _        | 4               | _          |
|                      |  |              | $\vdash$ | L        | Ш             |          | 匚            | _  | L        | Ш               |   |          | 79       |         | ļ            |          | $\dashv$ |           | $\Box$   | _        | _        | _ |          | 129        | ↓_        | Щ          |          | _        | -        | +               | _          |
|                      | Q 1                                    | -            | <u>i</u> | L        |               | _        | ┞            | _  | _        | Ц               |   |          | 80       |         | <u> </u>     | Щ        | $\dashv$ |           |          |          |          | 4 | -        | 130        | ↓_        | Щ          | Ш        | _        | $\dashv$ | $\dashv$        | _          |
| 3                    | _                                      |              | <u> </u> | L        |               | _        | L.           | <u> </u>   | _        | Ш               |   |          | 81       | <b></b> | ↓_           | Ш        |          |           |          |          | _        | 1 |          | 131        | ╀         | Ш          | Ш        | -        | 4        | $\dashv$        | _          |
| 3                    | _                                      | $\vdash$     | H        | <u> </u> | Щ             | ├        | $\vdash$     | ┞-   | L        | $\vdash$        | ļ |          | 82       | -       |              | Н        | Ц        |           |          | $\dashv$ |          | 4 | -        | 132        | ┼         | Н          | Н        | -        | +        | $\dashv$        | -          |
| 3                    |  | Н            | Щ        | H        | Н             | -        | -            | ⊢-   | <u> </u> | $\vdash \vdash$ |   | _        | 83       | _       | -            | $\vdash$ |          | _         | Щ        | $\dashv$ |          | - |          | 133        | -         | Н          | $\vdash$ | -        | 4        | +               | 4          |
| 3                    |  | Н            | Щ        | <u> </u> | Н             | $\vdash$ | $\vdash$     | ├  | ┡        | $\vdash$        |   | _        | 84<br>85 |         | $\vdash$     | $\vdash$ | $\dashv$ | _         | $\dashv$ | $\dashv$ |          | - |          | 135        | +         | Н          | H        | $\dashv$ | $\dashv$ | +               | $\dashv$   |
| 3                    |  | $\vdash$     | $\vdash$ | -        | Н             | $\vdash$ | ⊢            | $\vdash$   | <u> </u> | $\vdash$        |   |          | 86       |         | +-           |          | $\dashv$ | -         | _        | $\dashv$ |          | - |          | 136        | +         | Н          | Н        | $\dashv$ | $\dashv$ | +               | -          |
| 3                    | _                                      | $\vdash$     | $\vdash$ | $\vdash$ | Н             | $\vdash$ | $\vdash$     | $\vdash$   | $\vdash$ | $\vdash \vdash$ | } |          | 87       | +       | +            | Н        | -        | -         | -        | $\dashv$ | +        | - |          | 137        | +         | Н          | H        | +        | $\dashv$ | +               | $\neg$     |
| 3                    |  | $\vdash$     | Н        | $\vdash$ | Н             | $\vdash$ | ⊢            | ├-   | $\vdash$ | $\vdash$        | } | _        | 88       | +       | +            | Н        | $\dashv$ | $\dashv$  | $\vdash$ | ┥        | +        | ┨ |          | 138        | $\vdash$  | $\vdash$   | $\vdash$ | $\dashv$ | 十        | -               | $\neg$     |
| 3                    | _1                                     | $\vdash$     | H        | -        | Н             | $\vdash$ | $\vdash$     | <del> </del>                                     | $\vdash$ | Н               | } | _        | 89       |         | +-           | $\vdash$ | $\dashv$ | $\dashv$  | $\dashv$ | ᅥ        | $\dashv$ | 1 | -        | 139        | $\vdash$  | Н          | Н        | $\dashv$ | 十        | $\dashv$        | 7          |
| 4                    | _                                      |              | -        | Н        | Н             | $\vdash$ | $\vdash$     | <del>                                     </del> | $\vdash$ | Н               | } | _        | 90       | +-      | $\vdash$     | Н        | $\dashv$ | -         |          | $\dashv$ | +        | 1 | $\vdash$ | 140        | +         | H          | H        | +        | 十        | 十               | ┪          |
| 4                    | _                                      | -            | $\vdash$ | $\vdash$ | $\vdash$      | -        | +            | -  | $\vdash$ | Н               |   |          | 91       | +       | +            | Н        | $\dashv$ | $\dashv$  | $\dashv$ | $\dashv$ | +        | 1 |          | 141        | +-        | Н          | H        | $\dashv$ | +        | 十               | _          |
| 4                    |  | H            | $\vdash$ | -        | $\vdash$      | $\vdash$ | -            | $\vdash$   | -        | Н               |   |          | 92       | +       | ┼            | $\vdash$ | $\dashv$ | -         | Н        | $\dashv$ | +        | - |          | 142        | +         | $\vdash$   | Н        | +        | $\dashv$ | $\dashv$        | $\dashv$   |
| 4                    |  | H            | -        | $\vdash$ | $\vdash$      | $\vdash$ | $\vdash$     | 1  | $\vdash$ | Н               | ı | -        | 93       | _       | $\vdash$     | Н        | $\dashv$ | -         | Н        | $\dashv$ | +        | 1 | _        | 143        | +         | Н          | Н        | $\dashv$ | 7        | $\top$          | ٦          |
| 4                    | _                                      | 7            | Н        | $\vdash$ | $\vdash$      | $\vdash$ | <del> </del> | <del>                                     </del> | ┢        | Н               |   | -        | 94       | +       | $\vdash$     | Н        |          | -         | -        | $\dashv$ | $\dashv$ | 1 | _        | 144        | T         | Н          | Н        | 一        | 7        | $\top$          | ٦          |
| 4                    |  | Н            | H        | -        | H             | $\vdash$ | $\vdash$     | <del>  -</del>                                   | ┢        | Н               | } | -        | 95       | +       | +            | $\vdash$ |          | -         | $\dashv$ | -        | $\dashv$ | 1 |          | 145        | $\vdash$  | Н          | H        | $\dashv$ | ヿ        | $\top$          |            |
| 4                    |  | ۲            | H        |          |               | H        | $\vdash$     |  | $\vdash$ | Н               |   |          | 96       | $\top$  | 1            | Н        | $\dashv$ |           |          | $\dashv$ | $\dashv$ | 1 | -        | 146        | †         | Н          |          |          | $\neg$   | $\Box$          |            |
| 4                    |  | Н            | Н        | $\vdash$ | -             | ┢        | T            | $\vdash$   | $\vdash$ | Н               |   |          | 97       | T       | T            | М        | $\vdash$ | ┪         |          | 1        | 十        | 1 | -        | 147        | Τ         | П          |          |          | ╗        | $\Box$          |            |
| 4                    |  | Н            | Н        | $\vdash$ | Н             | H        | Т            | $\vdash$   | H        | Н               |   |          | 98       | 1       | T            | Н        | -        | $\neg$    |          | $\neg$   | $\top$   | 1 | $\vdash$ | 148        | 1         | П          |          |          | $\Box$   | $\Box$          |            |
| 4                    |  | Н            | Н        | Η        |               | Г        | $\vdash$     |  | $\vdash$ | П               |   |          | 99       |         | T            |          |          | $\exists$ |          |          | 十        | 1 | -        | 149        | T         |            |          |          | $\Box$   | $\perp$         | _          |
| 5                    |  | П            |          | Г        |               | Г        | 1            | 1  | Π        | П               |   |          | 100      |         |              |          |          |           |          |          | $\top$   | 7 |          | 150        |           |            |          | $\perp$  | ᆚ        | L               | $_{\perp}$ |